



TOGETHER WE CAN MAKE THE CHANGE!

INTERNATIONAL YOUTH DELIBERATION ON ENERGY FUTURES 2020

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FUTURE ENERGY SYSTEMS

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Prologue

This paper is a result of work by hundreds of high school students from 22 schools in 18 countries, in partnership with Future Energy Systems; Petrocultures Research Group; Just Powers; Language and Literacy Education at the University of British Columbia; The Centre for Global Citizenship Education and Research at the University of Alberta; The Centre for Global Education; and TakingITGlobal. Throughout seven months of engagement via networked technology, an online classroom, and global video conferences, students shared their research, examined commonalities and differences in standpoints and experiences, and identified future actions and research that are needed for energy transition in their diverse contexts. Finally, students met together online for four intensive days of deliberation and writing, creating a series of projects, including this document, that represents their collective voice. This paper is the culmination of months of online teamwork, hours of student collaboration, and the passion of these youth to share with a global audience their vision of a just energy future.

Cover artwork by Filip Rajpert, Poland.

Participant Schools

Brazil, Colégio Magno

Brazil, Centro Interescolar de Línguas de Taguatinga (CILT)

Canada, Paul William Kaeser High School

Canada, École Michaëlle-Jean

Colombia, Gimnasio Los Caobos

Costa Rica, St. Paul College

Finland, Helsingin skolan in Vantaa

Finland, Lintumetsän koulu

Ghana, Al-Rayan International School

India, The Hyderabad Public School

Indonesia, 42 Junior High School

Kenya, St. Austin's Academy

Kuwait, A 'Takamul International School

Nigeria, Army Day Secondary School Asokoro

Nigeria, Government Model Secondary School Jikwoyi

Peru, Colegio de Ciencias

Philippines, St. Joseph's Academy

Poland, Zespół Szkół Nr. 1 w Żorach

Slovenia, Gimnazija Ptuj

South Korea, Asia Pacific International School

Sultanate of Oman, United Private Schools

Uganda, Bukulula Girls High School

Addressing the Energy Crisis

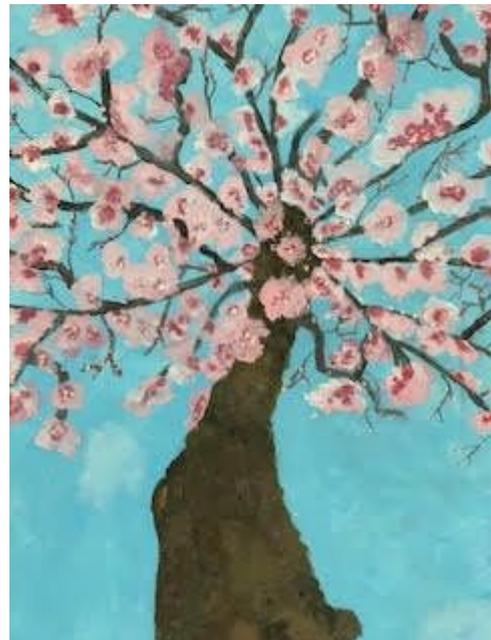
Thoughts from the 2020 International Youth Deliberation on Energy Futures

Introduction

Energy plays an essential part in the survival of our modern society. But somehow, people still don't have access to electricity, and the main way to provide energy is still harmful to the environment and to the people that it sustains. In our modern-day, the use of fossil fuels (oil, gas, coal), which are non-renewable and unsustainable sources of energy, will be depleted in the upcoming years. Fossil fuels are still the main source of energy worldwide, but they impact the environment in negative ways by contributing to global warming. We are now past the peak of oil and gas production.

“Global demand for energy is rising, driven by a growing population with rising living standards.” - Uchechimere Udonsi (Nigeria)

Energy and sustainability — important aspects of our daily lives — have become current issues in discussion around the world. Many problems like global warming have been aggravated because of the production of fossil fuel energy, which produces CO₂ and contributes to the enhanced greenhouse effect. But energy is essential for the economic growth of many countries, and in our capitalist global economies, profit is often valued above everything. This is why it is so challenging to transition into renewable sources of energy, such as solar, hydroelectric power, wind energy, and geothermal energy. Still, change is needed. As such, we must address the following themes:



- *Education:* Educating people is one of the most effective ways to create change. Knowledge is power and with power you can fight for change and for what you believe in.
- *Cultural and Social Change:* We have to change some behaviors that are still accepted in our society. That means changing the ways we live and consume, and questioning habits that have been engraved in how we live.
- *Economy:* We must calculate the economic impact of energy transition. Many countries like Venezuela or the Arab Emirates depend on the fossil fuel industry.

- *Collaboration and Differentiation:* Collaboration between countries is essential, especially “poor countries” and “rich countries” in the global North and global South. Bringing energy to countries that do not even have access to non-renewable energy is crucial to finding a good solution.

Education

Education is about giving people the power of knowledge and using this power for the benefit of everyone. It is important to educate people effectively about energy consumption and energy transition so that they can better understand the importance of our actions and choices and how they affect our planet. Changing our lifestyle and building consciousness about the connection between energy consumption and global warming are the first steps in contributing to energy justice and environmental conservation. If all individuals were taught about energy issues in schools, as part of the global curriculum, then they would be more likely to advocate for it.



“People won’t change what they don’t know about; so make them know about it. Be ready to discuss and defend your points, and possible counter arguments, more importantly; be ready to listen; because you might hear something you hadn’t thought about before.” - Madeline Buckley (Canada)

Energy education is important for all regions and countries, including those considered “in development.” As the old saying goes, people perish for lack of knowledge! Moreover, we recognize that educating for meaningful change requires a framework of support — working hand-in-hand with public agencies and non-governmental organizations in terms of funding and supporting educational programs on energy futures in all spheres of the world.

Leadership is also part of education. We encourage communities to lead by example, demonstrating the importance of energy transition and the consequences of inaction. For example, projects like roof-top farming can boost consumption of fresh foods and reduce the percentage of carbon in the atmosphere by decreasing the number of airplanes required to transport food across long distances.

Education must also include raising awareness about renewable energy, and the positive economic possibilities of energy transition. Although there are a growing number of energy-friendly small retailers and businesses, they are not as well known as the bigger companies using non-renewable energy. People should be made aware of these smaller

companies, possibly through advertising on social media, local television channels, radio, or other forms of digital media and marketing.

In order to create different energy futures, we need to make sure that people know how to be involved. Creating public awareness and promoting education are crucial steps in addressing energy transition and injustice in different parts of the world, and this can be accomplished through cultural and social action.



Cultural and Societal Change



Energy shapes society and culture, and vice versa. When there are changes in culture and society, often there are also changes in energy use as well. Additionally, the health and well-being of one often influences the other. Quality of life and political conditions — including infrastructural conditions, shelter, food, health, safety, etc. — directly affect individual and community access to clean and safe energy. “There are still a lot of people around the world – 1.2 billion or so – who do not have access to modern energy services,” explains Jim Watson, director of the UK Energy Research Centre. He goes on to point out, “There is going to be a lot of rising demand from regions like Asia, Latin America and parts of Africa.” Therefore, any societal or energy change must be led by the community to devise a locally specific plan.

“When we talk about energy we are not only talking about light, technology, or its sources, we are talking about everything that entails energy; namely, social impacts (injustices), the environment, economic and infrastructural impacts, cultural impacts and health impacts.” - Abril Alvarez (Costa Rica)

Countries learn to adapt overtime depending on their needs, political status, histories of colonization or colonizing, security, economies, and general worldwide trends — what is

selling, especially in new technologies. These adaptations are what form the basis of a country and its management and culture. We can look to these adaptations to see how past energy use determines the future lifestyle of a country. These adaptations are often the root of its current problem. For example, in Niger Delta, Nigeria, the use of oil bunkering has caused environmental degradation and the contamination of both water and soil. In Nigeria's Cross River state, indigenous fauna and flora are going extinct due to bush burning, poaching, and industrial logging. The effects of these actions will be felt for a long time to come, and will certainly have an impact on Nigeria's future.



Culture also determines how we live our daily lives, and how much energy we use. The food we consume, our lifestyles, behaviors, values, and thoughts can deeply impact our carbon footprint. In some of the activities we completed over the last year as part of the [International Youth Deliberation on Energy Futures](#) (IYDEF), we encountered the theory of “petrocultures” and learned that so much of what we own or use every day depends on oil. When it comes to making change, we understand that many cultures and societies see their youth as a powerless organ in society. However, the youth are often engaged in wanting to see and participate in energy change while other powerful organs need to come together in support. For instance, sectors of the population in older age brackets need to support energy transition as well to assure action.

“In Korean society and societies all around the world in general, the youth often feel powerless and succumb to the belief that they simply don’t have the capacity to contribute largely to society yet. However, these narratives are changing as more youth are joining in on the movement for a better future.” - Justin Suh (South Korea)

That said, we want to acknowledge our respect for those ancestors and elders who have gone before us, many of them living consuming less energy and living more in balance with their environments.

“Our ancestors enjoyed a ‘natural’ world, with natural foods, lights from reeds; in my community they used herbal medicines, firewood and charcoal for heating.” - Evelyn Edith (Uganda)

In order to make change not only in energy but also in any aspect of life, we count on the power of the society and its people. But the irony is the power of the society and its people often holds us back. For example, many members of our societies believe that climate change is not a problem at all and some think the earth will recover on its own, with no changes needed on our part. In other cases, there are conflicts and wars — such as in areas like Syria, Sudan, USA, and Iran — fuelled by the vestige of historical enmities and by the pursuit of control over the principal source of national income (i.e, oil and gas). Nowadays every society should be mature enough to stop fighting pointless wars and finally understand that humankind is the strongest when united.

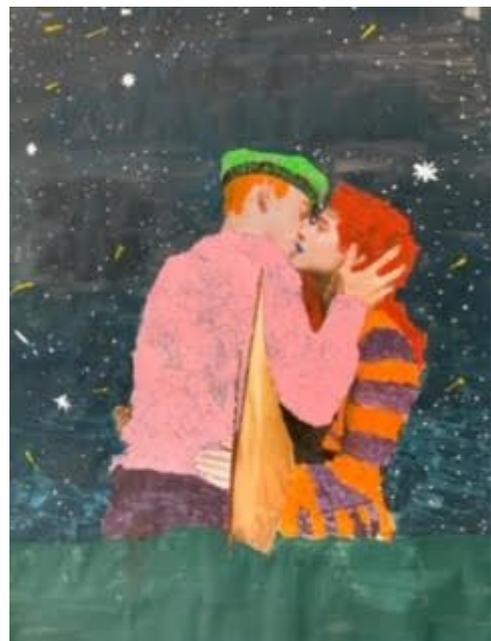
Economy and Change

The economy of a country influences how people consume and produce energy. As we learned over the past year with IYDEF, the fossil fuel industry has existed for over 200 years. Fossil fuels are the main source of power for many countries. As it stands, it is almost impossible to completely stop using fossil fuels because there would be a large impact on countries’ economies, and because fossil fuels make up a huge percentage of the total energy production needed to meet energy demand.

Many countries thus depend on fossil fuels, which means that it’s hard to transition to other forms of energy, especially in places where there is already energy poverty. Countries with more robust economies tend to have greater capabilities in adopting renewable energy than countries with struggling economies, because they often depend on cheaper energy sources — usually fossil fuels.

“Today’s world revolves around the economy, and the economy revolves around petroleum.” - Students from Gimnasio Los Caobos (Colombia)

Additionally, those countries and companies profiting from fossil fuels might see transitioning from non-renewable to renewable energy as a threat. We should show them that even though oil may be monetarily cheaper than renewable power in the short term,

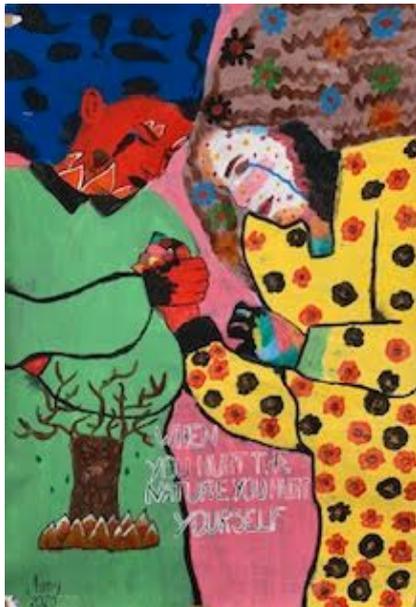


renewable energy is still more economically and environmentally sustainable in the long term. Many oil-producing regions of Nigeria, for instance, have suffered the environmental consequences of oil corruption, leading to widespread economic and social-political instability. Thus, energy transition is not only beneficial for the planet, but also important for a country's wealth and the lives of its people.

In essence, the true cost of energy is more than just dollars and cents; there are important political and social factors and consequences to consider as well. Energy transition might affect our economies at the start, but we should not fear change — especially if it will benefit us. Societies must have the will to change. Without such change, all actions made to convert to renewable energy would fail to overcome the significant drawbacks to continuing living in a petroculture.



Collaboration and Differentiation



The energy and climate crisis requires equal and committed collaboration from all the countries of the world, especially given that energy is a universal demand. Taking action means working toward the unity of humankind despite the differences which seem to divide it — color, religion, the region of inhabitation and the like — to devise a solution to address the growing threat to survival judiciously.

In this process, we must consider variation in the demand for energy. In most households in North America, for example, energy is often taken for granted and is usually used in disproportionate amounts in comparison to countries with a rural population, like Ghana, Nigeria, Uganda, and India.

That said, there are differences in energy use across classes. For example, India was known for ages as divided based on caste. Even though such differentiation is formally abolished now, there is still a division between rural and urban which determines whether

households are electrified or not. Most people that do have access to this “gift” of electricity tend to take it for granted or thank the gods above for it. This is a sign of ignorance, wherein the so-called educated people may not always seek to provide help for the lower sections, dismissing it on account of past-life karma or religious beliefs.

“Currently very few people have access to renewable energy, as cost and accessibility limit having this kind of privilege.” - Rosita Llanto Alejo (Peru)

Motivation for change is a major factor in energy transition. In countries of the global North, there is often a widespread desire for renewable-favoring infrastructure, but concerns such as the economy and the financial security of citizens involved in the fossil fuel industry bar momentum. While it’s true that jobs in the fossil fuel industry will likely be lost, there will be just as many jobs which arise from the production of renewable energy. For example, people are needed to produce and install silicon solar batteries, or do spot checks on hydro dams.



We would also like to note that this is not the first time transition has been met with concerns about income and jobs. In the USA, when New York was just starting to become a populous city, the roads were crowded by horses and buggies. Not long after Ford released his vehicle design, horses stopped crowding the streets. At first, the city’s stable boys were concerned about losing their jobs, but they found new jobs with Ford, who needed workers to make the vehicles.

The question then becomes, how will we work together to achieve energy transition? Agencies like the United Nations might have the necessary global communications infrastructure to address large-scale energy transition, but they would still need widespread cooperation. A new global organization might be necessary to encourage countries to work together in stronger and more balanced relationships while adapting to their local contexts. Responding to the energy crisis requires unity across all levels, and all must be involved before any energy framework is deemed as just.

“We shouldn't sit idle. Who're we waiting for? The future of not only us, but our children, grand-children and THEIR children also lies within our generation's hand.” - Prashansa Rathod (India)

Conclusion

We have outlined here the main themes required to address the global energy and climate crisis: education, cultural and social change, the economy, and collaboration/differentiation. Making change is possible, but we need to raise awareness and help each other to change the way we understand and use energy. Most importantly, we must work together across different countries, and we must ensure that everyone has energy access.

Images:

Cover Image by Filip Rajper, Zespół Szkół Nr. 1 w Żorach (Poland)

In-text images by students from Centro Interescolar de Línguas de Taguatinga (CILT) (Brazil)

